E-Nav Test #3 Review Guide

Be able to define or identify the following terms. These terms will be used for the Multiple Choice and Fill in the Blank Questions:

* Electronic Chart Display System
* Electronic Chart Display and Information System (ECDIS)
* Electronic Chart System (ECS)
* Nautical Chart
* Performance Standards
* Type Approval
* General ECDIS Training
* Type Specific Training
* Raster Charts
* Vector Charts
* Official Charts
* ENC
* RNC
* S-63 Format
* S-52 Format
* SENC
* Safety Frame
* Overscale
* Underscale
* Layers vs Overlays
* Display Filters (Base vs Standard vs Custom)
* SCAMIN
* Shallow Contour vs Safety Contour vs Deep Contour
* Kernel
* WEND
* Data Server
* Distributor
* Direct Licensing vs Pay as you Sail
* CCRP
* XTD
* Alarm vs Indication

Be able to write an in-depth discussion on the following

* What is an ECDIS? What is an ECS? What is RCDS Mode? What can be used as an official chart? If it cannot be used as an official chart, why would you want this option?
* In order for your ECDIS to be used as the official chart, what requirements must be met?
* Describe what a Raster Chart is and how it appears on your ECDIS. List the benefits and disadvantages of a Raster Chart
* Describe what a Vector chart is and how it appears on your ECDIS. List the benefits and disadvantages of a Vector Chart
* What is the ECDIS Mindset?
* What is the basic process of how Hydrographic Data becomes an ENC, and then we purchase the ENC? Identify the parties involved with each step
* What are the basic requirements of the IHO Data Protection Scheme for protecting ENCs while updating or purchasing? Give a basic description of each requirement.
* Describe the 4 different ways to update the charts on your ECDIS along with their advantages and the disadvantages?
* What is the difference between Sequential Update Strategy and Cumulative Update Strategy? As a navigator, what must you do differently between the two update strategies when updating your ENCs?
* Describe in detail the 3 steps you must take while using the ECDIS to create a route on an ECDIS and ensure that the route is safe of any potential navigation hazards.
* What is the difference between the Electronic Logbook feature and the Voyage Recorder Feature on your ECDIS? What can these two features be used for?
* What are the 3 statuses for Alarms? What indicates these different statuses and how do they change status?
* Describe the 5 major areas of Safety Concerns when using an ECDIS?
* List a few examples of Errors of Data. Explain why these are concerns or how they could be hazardous when using the ECDIS.
* List a few examples of Errors of Interpretation. Explain why these are concerns or how they could be hazardous when using the ECDIS.
* List a few examples of Sensor Data Errors. Explain why these are concerns or how they could be hazardous when using the ECDIS.
* List a few examples of Anomalies of the ECDIS. Explain why these are concerns or how they could be hazardous when using the ECDIS. What is the best way to prevent this?
* List a few examples of Over Reliance on the ECDIS. Explain why these are concerns or how they could be hazardous when using the ECDIS.
* You are on a paperless bridge and your GPS fails. What actions should you take?